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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Army										Date: February 2016		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0607138A / Fixed Wing Product Improvement Program							
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	-	0.819	1.151	0.796	-	0.796	0.894	2.076	1.619	2.147	Continuing	Continuing
ES5: Fixed Wing Product Improvement Program	-	0.819	1.151	0.796	-	0.796	0.894	2.076	1.619	2.147	Continuing	Continuing

Note

Prior funding for this program was received on Program Element 0203744A Project D18. This is not a new start.

A. Mission Description and Budget Item Justification

The budget line provides for Non-Recurring Engineering (NRE), development of supplemental type certificates (STC) and associated developmental testing, and integration of all Army fixed wing aircraft to provide Communications, Navigation and Surveillance (CNS), Aircraft Survivability Equipment (ASE), and Department of Defense (DoD) mandated safety equipment to meet current and evolving international and Army standards. As requirements for new avionics equipment continue, aircraft delays and airspace exclusions are likely for aircraft not properly equipped. Upgrade of communication and aircraft modifications will assure worldwide deployability for those required to deploy. This budget line will also provide funding for studies, evaluations and Analysis of Alternatives to support emerging Army fixed wing requirements for product improvements to support the Army fleet.

In accordance with the Office of the Secretary of Defense (OSD) Director of Operational Test and Evaluation (DOT&E) Working Oversight List (dtd 26 Jun 15), the Fixed Wing Utility Aircraft Program will be required to undergo both Live Fire Testing and Operational Testing. Fiscal Year (FY) 2017 Research, Development, Test and Evaluation (RDTE) dollars in the amount of \$0.796 million provides funding for Live Fire Test & Evaluation (LFT&E) hardware materials on Fixed Wing Utility Aircraft. The LFT&E hardware materials consist of Structural Wing, Engine, Propeller, Fuselage, Wing Iron Bird, Hydraulic System, Dry Bay Fire Suppression System, and Emergency Supplemental Oxygen Supply (ESOS) System.

B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	0.819	1.151	0.999	-	0.999
Current President's Budget	0.819	1.151	0.796	-	0.796
Total Adjustments	0.000	0.000	-0.203	-	-0.203
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments 1	-	-	-0.203	-	-0.203

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army										Date: February 2016		
Appropriation/Budget Activity 2040 / 7					R-1 Program Element (Number/Name) PE 0607138A / Fixed Wing Product Improvement Program				Project (Number/Name) ES5 / Fixed Wing Product Improvement Program			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
ES5: Fixed Wing Product Improvement Program	-	0.819	1.151	0.796	-	0.796	0.894	2.076	1.619	2.147	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Funding for this Program Element (PE) was previously on PE 0203744A Project D18 - Aircraft Modifications/Product Improvement Programs

A. Mission Description and Budget Item Justification

The budget line provides for Non-Recurring Engineering (NRE), development of supplemental type certificates (STC) and associated developmental testing, and integration of all Army fixed wing aircraft to provide Communications, Navigation and Surveillance (CNS), Aircraft Survivability Equipment (ASE), and Department of Defense (DoD) mandated safety equipment to meet current and evolving international and Army standards. As requirements for new avionics equipment continue, aircraft delays and airspace exclusions are likely for aircraft not properly equipped. Upgrade of communication and aircraft modifications will assure worldwide deployability for those required to deploy. This budget line will also provide funding for studies, evaluations and Analysis of Alternatives to support emerging Army fixed wing requirements for product improvements to support the Army fleet.

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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2015	FY 2016	FY 2017
Title: Non-recurring Engineering	0.770	1.082	-
Description: Non-recurring engineering efforts provide improved performance to Army fixed wing aircraft for communication, navigation, and surveillance equipment.			
FY 2015 Accomplishments: Non-recurring engineering efforts provide improved performance to Army fixed wing aircraft for communication, navigation, and surveillance equipment.			
FY 2016 Plans:			

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Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0607138A / Fixed Wing Product Improvement Program	Project (Number/Name) ES5 / Fixed Wing Product Improvement Program

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
Non-recurring engineering efforts provide improved performance to Army fixed wing aircraft for communication, navigation, and surveillance equipment.			
Title: Program Management (PM) Description: PM Fixed Wing (FW) FY 2015 Accomplishments: PM Fixed Wing (FW) FY 2016 Plans: PM Fixed Wing (FW)	0.049	0.069	-
Title: Test And Evaluation Description: Contractor hardware support for LFT&E on Fixed Wing Utility Aircraft (FUA). FY 2017 Plans: Funding provides for LFT&E hardware materials on FUA. The LFT&E hardware materials consist of Structural Wing, Engine, Propeller, Fuselage, Wing Iron Bird, Hydraulic System, Dry Bay Fire Suppression System, and ESOS System.	-	-	0.796
Accomplishments/Planned Programs Subtotals	0.819	1.151	0.796

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• A11300: Utility F/W Aircraft	10.787	0.879	58.046	-	58.046	118.271	107.937	135.298	102.072	Continuing	Continuing
• AA0270: Utility/ Cargo Airplane Mods	15.029	16.166	17.526	-	17.526	16.106	16.442	15.470	14.692	Continuing	Continuing

Remarks

D. Acquisition Strategy

The US Army Fixed Wing acquisition and modernization strategy leverages commercial derivative aircraft through the use of supplemental type certificates (STC) and associated testing and includes cockpit modernization for civil and tactical upgrades of military unique equipment and integration of Mission Equipment Packages (MEP). Cockpit modernization upgrades include items such as dual Flight Management Systems, Terrain Area Warning Systems, transponder, Mode S/5 transponders, Satellite Communications, Traffic Alert and Collision Avoidance II, Flight Data Recorders, Cockpit Voice Recorders, communication radios, military Global Positioning System (GPS), Wide Area Augmentation System/ Localizer Performance with Vertical Guidance, Automatic Dependence Surveillance Broadcast (ADS-B) Out, M-code GPS, Blue Force Tracker, and Smart books. Intelligence, Surveillance, and Reconnaissance (ISR) MEP upgrades include integration of multi-intelligence systems.

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E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0607138A / Fixed Wing Product Improvement Program	Project (Number/Name) ES5 / Fixed Wing Product Improvement Program
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Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Management Support	Various	PM Fixed Wing : Redstone Arsenal, AL	0.000	0.049		0.069		-		-		-	Continuing	Continuing	0
Subtotal			0.000	0.049		0.069		-		-		-	-	-	0.000

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Fixed Wing Non-recurring Engineering	Various	Various : Various	0.000	0.770		1.082		-		-		-	Continuing	Continuing	0
Subtotal			0.000	0.770		1.082		-		-		-	-	-	0.000

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Contractor Hardware Support for Live-Fire Testing	Various	Various : Various	0.000	-		-		0.796		-		0.796	Continuing	Continuing	0
Subtotal			0.000	-		-		0.796		-		0.796	-	-	0.000

	Prior Years	FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract		
Project Cost Totals			0.000	0.819		1.151		0.796		-		0.796	-	-	0.000

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0607138A / Fixed Wing Product Improvement Program	Project (Number/Name) ES5 / Fixed Wing Product Improvement Program
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
FW Non-recurring Engineering	FW Non-recurring Engineering																															
Live Fire Test & Evaluation																	LFT&E															

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0607138A / <i>Fixed Wing Product Improvement Program</i>	Project (Number/Name) ES5 / <i>Fixed Wing Product Improvement Program</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
FW Non-recurring Engineering	4	2014	4	2021
Live Fire Test & Evaluation	4	2017	4	2019

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